Causes of Death Quiz

1. Which of the following diseases has been recognized since antiquity?

a. AIDS

b. Ebola hemorrhagic fever

c. guinea worm disease

d. Legionnaire disease

2. In the 1700s and 1800s, a terrible, wasting disease killed thousands of European and American city dwellers. What disease was this?

a. AIDS

b. lung cancer

c. polio

d. tuberculosis

3. What infectious disease causing severe fever and chills plagued settlers in the Southern and Midwestern United States during the 1800s and early 1900s?

a. Legionnaire disease

b. Lyme disease

c. malaria

d. schistosomiasis

4. Most deaths among U.S. servicemen in 1918 were due to what cause?

a. automobile accidents

b. flu

c. injuries sustained on the battlefields of World War I

d. plague

5. In 1994, a terrible disease nearly killed an 18-year-old high school student in California. Which of the following diseases was it?

a. AIDS

b. breast cancer

c. cystic fibrosis

d. tuberculosis

6. According to the World Health Organization, which of the following diseases caused more deaths in 1998 than the others?

a. AIDS

b. diabetes

c. lung cancer

d. pneumonia

Disease Cards

AIDS	
Infectious Agent:	virus (human immunodeficiency virus)
Evidence of the Disease:	pneumonia, certain types of cancer, and other illnesses typical of people with failing immune systems
Treatment:	no cure exists, but a combination of antiviral drugs can prolong a reasonable quality of life for years
Transmission:	intimate contact: vaginal, anal, and oral sexual contact; blood-to-blood contact through shared needles, needle-stick accidents, transfusions and transplants; and mother-to-newborn infection
Preventive Measures:	implement educational programs to promote “safer” sex and prevent drug abuse; screen blood sources for HIV; follow appropriate hospital procedures to prevent accidental spread of HIV
History:	first recognized in 1979; currently a global epidemic

Cholera	
Infectious Agent:	bacteria (*Vibrio cholerae*)
Evidence of the Disease:	diarrhea, dehydration
Treatment:	fluids and antibiotics
Transmission:	ingestion of bacteria in contaminated food and water
Preventive Measures:	purify water; treat sewage; cook and promptly refrigerate food
History:	present from antiquity; increasing number of worldwide cases in recent years

Creutzfeldt-Jakob Disease (CJD)	
Infectious Agent:	prion (scrapie PrP)
Evidence of the Disease:	deteriorating mental capacity, loss of coordination
Treatment:	none available at this time
Transmission:	infectious cases: intimate contact with infected tissues (most cases are due to unknown cause; a few are inherited)
Preventive Measures:	none known at this time
History:	first described in 1982

Ebola Hemorrhagic Fever	
Infectious Agent:	Ebola virus
Evidence of the Disease:	headache; fever; vomiting; diarrhea; bleeding from the nose, mouth, eyes, and other orifices
Treatment:	no cure exists; treatment is to relieve symptoms
Transmission:	intimate contact with infectious agent in blood
Preventive Measures:	follow appropriate disease control procedures in hospitals; avoid burial customs that allow contact with tissues of deceased victims; initial victim in an outbreak likely was infected with the virus from an animal that carries the virus with no ill effects; that animal “reservoir” is unknown at this time
History:	first recognized in 1976; 18 outbreaks since then

Guinea Worm Disease (Drancunculiasis)	
Infectious Agent:	helminth (the roundworm *Dracunculus medinensis*)
Evidence of the Disease:	inflammation, severe joint pain, severe itching under the skin, skin ulcers
Treatment:	antihelminthic drugs may hasten expulsion of worm
Transmission:	ingestion of water contaminated by the copepod (the intermediate host) that carries the larvae
Preventive Measures:	purify water
History:	present from antiquity; has decreased dramatically in the last half of the 20th century

Influenza	
Infectious Agent:	influenza virus
Evidence of the Disease:	headache, fever, chills, muscle aches; possibly sore throat, cough, chest pain
Treatment:	relieve symptoms
Transmission:	casual contact with the infectious agent in secretions or on droplets from those who are infected
Preventive Measures:	vaccine against current strains; wash hands frequently
History:	present from antiquity; epidemics occur at regular intervals

Legionnaire Disease	
Infectious Agent:	bacteria (*Legionella pneumophilia*)
Evidence of the Disease:	fever, cough, chest and abdominal pain, diarrhea
Treatment:	antibiotics
Transmission:	inhalation of bacteria on airborne particles, especially from water tanks
Preventive Measures:	disinfect cooling tower waters
History:	first recognized in 1976; occasional outbreaks since then

Lyme Disease	
Infectious Agent:	bacteria (*Borrelia burgdorferi*)
Evidence of the Disease:	initially an expanding, ringlike rash, fever, fatigue, and headache; followed weeks or months later by chronic arthritis
Treatment:	antibiotics
Transmission:	bites from infected ticks
Preventive Measures**:**	wear socks, long pants, and long-sleeved shirts in tick-infested areas and check carefully for ticks after leaving the area; a vaccine for individuals at high risk of contracting the disease
History:	first recognized as an infectious disease in 1975; infectious agent identified in 1982

Malaria	
Infectious Agent:	protozoa (various *Plasmodium* species)
Evidence of the Disease:	cyclic fever and chills, anemia
Treatment:	antiprotozoan drugs
Transmission:	bites from infected mosquitos
Preventive Measures:	follow procedures to reduce mosquitos such as eliminating standing water and spraying with insecticides; follow procedures to limit contact between humans and mosquitos such as installing screens and bed nets and using insect repellant
History:	present from antiquity; has increased in recent years

Streptococcal Pharyngitis (“Strep Throat”)	
Infectious Agent:	bacteria (*Streptococcus pyogenes*)
Evidence of the Disease:	painful, red and inflamed throat; tonsils may swell and become coated with white patches
Treatment:	antibiotics
Transmission:	casual contact with infectious agent in secretions or on droplets
Preventive Measures:	wash hands frequently; disinfect contaminated materials
History:	present from antiquity

Plague	
Infectious Agent:	bacteria (*Yersinia pestis*)
Evidence of the Disease:	bubonic form: swollen lymph nodes, fever, blocked circulation pneumonic form: pneumonia, blood infection
Treatment:	antibiotics
Transmission:	usually bites from infected fleas carried by wild rodents; also inhalation of airborne bacteria from individual with pneumonic plague
Preventive Measures:	eliminate rodents near human habitation; use insect repellants to avoid flea bites; use insecticides to treat domestic animals likely to come in contact with infected rodents
History:	present from antiquity; responsible for several global epidemics including the Black Death in 14th-century Europe

Pneumonia	
Infectious Agent:	several types of bacteria, viruses, and fungi
Evidence of the Disease:	fever, cough, chest pain
Treatment:	antimicrobials for bacterial and fungal pneumonias; treatment to relieve symptoms for viral pneumonias
Transmission:	casual contact with infectious agent in secretions or on droplets from infected individuals
Preventive Measures:	use vaccines available to prevent some forms of pneumonia; improve social conditions such as crowded living quarters
History:	present from antiquity; remains the leading cause of death from infectious disease among the elderly

Polio	
Infectious Agent:	polio virus
Evidence of the Disease:	fever, fatigue, headache, nausea, muscle pain; in severe cases, paralysis
Treatment:	generally none; respiratory assistance in acute paralytic cases
Transmission:	ingestion of virus in contaminated food and water
Preventive Measures:	vaccinate against current strains
History:	present from antiquity; continues to be a problem in some developing countries although it has been eliminated in most countries

Schistosomiasis	
Infectious Agent:	helminth (several species of the flatworm *Schistosoma*)
Evidence of the Disease:	may include a variety of symptoms such as fever, diarrhea, anemia, and liver failure
Treatment:	antihelminthic drugs may be effective if used early enough; cure not usually possible once the parasites are established
Transmission:	*Schistosoma* larvae enter human skin from snail-infested water (snails are intermediate hosts)
Preventive Measures:	reduce snail habitats (still pools of water); wear rubber boots in infested waters; treat sewage (to prevent eggs from reaching water sources)
History:	present from antiquity; increasing incidence in recent years

Tuberculosis	
Infectious Agent:	bacteria (*Mycobacterium tuberculosis*)
Evidence of the Disease:	persistent cough, fever, fatigue, weight loss
Treatment:	antibiotics
Transmission:	inhalation of bacteria on airborne particles
Preventive Measures:	improve social conditions such as crowded living quarters; vaccine available, although its effectiveness varies among different populations
History:	possibly present from antiquity, peaked in early 19th century and has declined until a significant increase in late 1980s/early 1990s

Disease Classifications

Infectious Agent

Mechanism of Transmission

History of Occurrence
